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### (54) An ink jet printhead assembled from partial width array printheads

(57) An ink jet printhead (10) is formed by assembling a plurality of partial width array printheads (12) into at least two fixed parallel rows, in which the partial width array printheads in each row are staggered from each other. The length of the rows of staggered partial width array printheads provide for either extended swath or full pagewidth printing capability. The overlapping end portions of each partial width array printhead have an equal number of nozzles (14) or droplet ejecting locations therein which are in substantial alignment with each other. A pixel location is assigned to each nozzle or droplet ejecting location with the same pixel location being aligned to the substantially aligned nozzles or droplet ejecting locations in the overlapping end portions of the partial width array printheads. Each pixel location requires multiple ink droplets in the range of zero to a fixed total from its assigned nozzles or droplet ejecting locations. By dividing the total number of ink droplets to be directed to a pixel location between the nozzles or droplet ejecting locations which share a pixel location and changing the ratio of the total number of droplets between the nozzles or droplet ejecting locations, these regions of the full width array printhead smooth out the normal stitch effect generally present in extended or full width array printheads which are assembled from subunits, so that the mechanical alignment tolerance can be relaxed between the partial width

array printheads without sacrificing print quality.

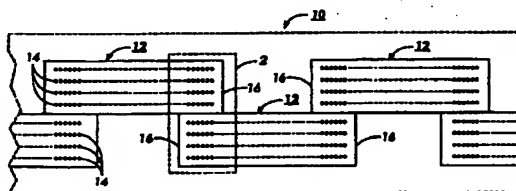


FIG. 1

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# EUROPEAN SEARCH REPORT

Application Number  
EP 98 12 0262

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 14 October 1999	Examiner Rivero, C
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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EP 98 12 0262

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82